

## REMARKS

This supplemental amendment is filed to correct minor informalities in claims 1 and 9, and to add new dependent claims 24-30 more distinctly pointing out the subject matter for which applicant seeks protection.

### *New and Amended Claims*

Referring to the amendments made to the claims, claims 1 and 9 have been amended, without narrowing, to employ more consistent terminology.

Support for new claims 24-30 can be found in applicant's specification at the following locations:

claim 24:	page 10, lines 5-12;
claim 25:	page 10, lines 5-8;
claim 26:	page 5, lines 22-26;
claim 27:	page 3, lines 24-28;
claim 28:	page 3, lines 24-28;
claim 29:	page 9, lines 15-16 and page 10, lines 26-27; and
claim 30:	page 9, lines 8-9 and page 10, lines 5-12.

New claims 24-30 depend either directly or indirectly from claim 1 and are therefore believed allowable with claim 1 for the reasons that claim 1 is believed allowable. New claims 24-30 are furthermore believed clearly and patentably distinguished from the art of record, and therefore allowable, by the additional meaningful limitations they recite.

For example, new claim 24 recites that the complete amino acid sequence of the recombinant or synthetic gelatin-like polypeptide is essentially similar to a region of the amino acid sequence of a native collagen. The term "native collagen" is explained in the specification at page 3, lines 28-31 and "essentially similar" is explained at page 10, lines 8-12 of the specification. Applicant believes that neither Chang et al. reference discloses or suggests that a polypeptide with a complete sequence essentially similar to a region of

a native collagen could have a calculated glass transition temperature of higher than 180 degrees Celsius.

Claims 26 and 27 recite that the complete recombinant or synthetic gelatin-like polypeptide has, respectively, a calculated average glass transition temperature, or a measured glass transition temperature, higher than the corresponding values for the complete native collagen by various amounts, as specified in the respective claim. Neither Chang et al. reference discloses or suggests that a region of the native polypeptide could be identified that would provide higher glass transition temperatures when expressed as an essentially similar polypeptide, applicant believes.

Furthermore new claim 28 recites that the native collagen amino acid sequence has a calculated moving average glass transition temperature for the amino acid region which is at least about 10 degrees Celsius higher than the calculated average collagen glass transition temperature of the complete native collagen. Neither Chang et al. reference discloses or suggests that a polypeptide region could be selected according to a moving average glass transition temperature values to yield a product having a higher calculated glass transition temperature than the complete native collagen.

Also, claim 29 recites that the recombinant or synthetic gelatin-like polypeptide has a molecular weight between 3,000 Dalton and 80,000 Dalton and the native collagen has a molecular weight between 10,000 Dalton and 300,000 Dalton. Thus, the recombinant or synthetic gelatin-like polypeptide can be a relatively small fragment of the native collagen, which is not disclosed or suggested by either Chang et al. reference, applicant believes.

Lastly, claim 30 recites that the complete amino acid sequence of the recombinant or synthetic gelatin-like polypeptide comprises a repetitive sequence. The repetitive sequence can comprise a desired number of repetitions of a unit sequence which is

essentially similar to a region of a native collagen amino acid sequence. Embodiments of the invention according to claim 30 can have both a relatively high glass transition temperature as well as a molecular weight which is higher than that of a single iteration of the native collagen region.

### ***Conclusion***

In view of the above amendments and the discussion relating thereto, it is respectfully submitted that the instant application, as amended, is in condition for allowance. Favorable reconsideration and allowance are earnestly solicited. If for any reason the Examiner feels that consultation with Applicant's representative would be helpful in the advancement of the prosecution, the Examiner is invited to call the undersigned practitioner below for an interview.

Respectfully submitted,

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